



Bill Owens
Governor

Colorado Department of Local Affairs

Executive Director, Bob Brooks

DIVISION OF PROPERTY TAXATION

Mary E. Huddleston
Property Tax Administrator

TO: All Interested Parties

FROM: Mary E. Huddleston
Property Tax Administrator

SUBJECT: Colorado 2001 Personal Property Tables and Factors

DATE: January 17, 2001

MEMORANDUM

This file contains the Colorado year 2001 Replacement Cost Factor Tables, Economic Life Guidelines, Percent Good Tables, and Level of Adjustment Factors. Each year these tables and factors are updated and published by the Colorado Division of Property Taxation and approved by the Colorado Statutory Advisory Committee.

The replacement cost factors, economic life estimates, and percent good tables are provided to assist Colorado county assessors in valuing personal property by the cost approach.

If you have any questions regarding this information, please call us at (303) 866-2371.

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REPLACEMENT COST FACTORS, ECONOMIC LIFE ESTIMATES, PERCENT GOOD TABLE AND LEVEL OF VALUE ADJUSTMENT FACTORS

The replacement cost factors, economic life estimates, and percent good table are provided to assist county assessors in valuing personal property by the cost approach. The level of value adjustment factors are provided pursuant to 39-1-104(12.3), C.R.S., and must be used to factor current actual values of personal property to the level of value in effect for real property.

The tables and factors published here are subject to verification in the marketplace. All cost approach value estimates are based upon the factors and tables found in this section. Cost approach value estimates must be reconciled to the market and income approaches to value based upon the appraiser's opinion as to the reliability of the information used to derive the value estimates from each approach. Reconciliation of the applicable approaches to value is required for the valuation of all personal property in Colorado, including cable TV (CATV) systems.

Actual Value Determined When.

(13)(a) ...the cost approach shall establish the maximum value of property if all costs incurred in the acquisition and installation of such property are fully and completely disclosed by the property owner to the assessing officer.

(c) ...However, nothing in this subsection (13) shall preclude the assessing officers from considering the market approach or income approach to the appraisal of personal property when such considerations would result in a lower value of the property and when such valuation is based on independent information obtained by the assessing officers.

39-1-103(13), C.R.S.

Counties that develop in-house trending or depreciation tables must submit them annually for approval to the Statutory Advisory Committee to the Property Tax Administrator prior to use.

As the property under appraisal ages, the cost approach becomes less indicative of the property value. After fifteen years of age, the recommended valuation procedure is to measure the value of depreciated equipment directly in the marketplace, if possible.

COST FACTOR TABLES

The replacement cost factor tables are provided to assist the assessor in the determination of replacement cost new estimates by multiplying original or historical cost of personal property items by the cost price indexes published and made available through the courtesy of the Marshall Swift Publication Company. When the original cost is multiplied by the factor for the year of acquisition, the product will approximate the current cost to replace, or the Replacement Cost New (RCN), of the item being appraised with an item having similar utility.

The assessor must select the appropriate cost factor table that corresponds to the type of equipment being appraised. Thirteen tables are supplied. In many instances, the individual index tables cover more than one type of commercial or industrial property. Specific types of commercial and industrial property are found in each table.

If the property to be factored can be specifically identified, the appropriate specific factor table (such as 3 for office equipment) should be applied. If the property cannot specifically be identified, the factor for the business type may be used. If property is generally useful in many types of business activities, the predominant use shall determine the cost factor code.

If particular property types are not included in the table, a comparable property type cost factor table may be selected. The "average of all" (Table 1) cost factor table should be selected if the specific property type is not included in any of the cost factor tables.

After selecting the appropriate cost factor table, the assessor uses the specific cost factor that corresponds to the year of acquisition of the equipment. The original cost of the equipment is then multiplied by that cost factor to arrive at the estimated current replacement cost new (RCN).

Example:					
Property Type	Factor Number	Year of Acquisition	Cost	Factor	RCN
Office Desks	3	1996	\$1,625	105	\$1,706

In other words, it would cost \$1,706 on the current assessment date to replace office desks purchased in 1996 for \$1,625.

**PERSONAL PROPERTY
REPLACEMENT COST NEW FACTORS**
Types of Property Included in Factor Groupings

Cost Factor Table

<u>Reference Number</u>	<u>Property Type</u>
1	Average of All
2	Candy & Confectionery, Creamery & Dairy Flour, Cereal & Feed, Garage, Meat Packing, Paint Refrigeration, & Rubber
3	Office Equipment (excluding copiers) Office Furniture
4	Retail & Wholesale Stores, Warehousing
5	Rental Furnishings, Apartments, Hotels, Motels
6	Banks, Savings and Loans, Restaurants & Lounges, Theaters
7	Contractors Equipment
8	Laundry & Cleaning Equipment

Source: Marshall & Swift, October 2000

**PERSONAL PROPERTY
REPLACEMENT COST NEW FACTORS
Types of Property Included in Factor Groupings**

Cost Factor Table

<u>Reference Number</u>	<u>Property Type</u>
9	Bakery, Bottling, Canneries, & Fruit Packing
10	Brewing & Distilling, Cement, Clay Products, Glass, Logging, Metal Working, Mining & Milling
11	Chemical, Electrical Equipment Manufacturing, Paper, Motion Picture & Television, Printing & Woodworking
12	All Petroleum, Textile
13*	Computer & PC Equipment, Computer-dependent Equipment, Telephone & Telecommunication Equipment, Copiers

Source: Marshall & Swift, October 2000

*Please refer to Section VII, **SPECIAL PERSONAL PROPERTY VALUATION ISSUES, CLASSIFICATION AND VALUATION OF PERSONAL COMPUTERS (PCs), OTHER COMPUTER EQUIPMENT, COMPUTER-DEPENDENT EQUIPMENT, AND TELECOMMUNICATION EQUIPMENT** for more information.

**2001 PERSONAL PROPERTY
REPLACEMENT COST NEW FACTORS**

**Cost Factor Table
Reference Numbers**

<u>Year Acquired</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
1975	246	245	222	245	240	229
1976	231	231	210	229	226	216
1977	220	220	202	218	216	207
1978	204	205	190	201	201	193
1979	187	187	175	184	185	177
1980	170	169	162	170	171	164
1981	154	153	149	156	157	151
1982	147	145	143	150	151	146
1983	144	143	140	146	148	142
1984	141	139	136	142	143	138
1985	139	137	134	140	141	136
1986	137	136	133	138	140	135
1987	135	134	130	136	138	132
1988	130	129	125	130	132	127
1989	123	122	119	124	125	121
1990	120	119	117	121	122	119
1991	118	117	115	119	119	117
1992	116	115	114	117	117	115
1993	114	113	112	114	114	112
1994	111	110	109	110	110	109
1995	107	106	106	107	107	106
1996	105	105	105	105	106	105
1997	104	103	103	103	104	103
1998	103	103	103	103	103	103
1999	103	102	102	103	102	102
2000	100	100	100	100	100	100

Source: Marshall & Swift, October, 2000

**2001 PERSONAL PROPERTY
REPLACEMENT COST NEW FACTORS**

**Cost Factor Table
Reference Numbers**

<u>Year Acquired</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
1975	254	241	243	241	232	244	100
1976	238	227	229	227	220	231	100
1977	226	217	218	215	209	219	100
1978	209	202	203	200	196	203	100
1979	191	186	185	183	178	185	100
1980	173	169	168	166	160	167	100
1981	155	153	152	150	146	149	100
1982	147	147	146	142	141	140	100
1983	144	144	144	140	139	138	100
1984	141	140	140	136	135	136	100
1985	139	138	138	134	133	134	100
1986	138	137	138	133	133	134	100
1987	136	135	136	132	131	134	100
1988	132	130	130	128	124	129	100
1989	126	123	122	122	117	122	100
1990	122	120	119	118	115	119	100
1991	119	117	117	116	114	116	100
1992	117	116	116	115	114	115	100
1993	114	114	114	113	113	114	100
1994	111	111	111	111	110	112	100
1995	108	107	107	107	105	108	100
1996	106	105	105	105	104	106	100
1997	104	104	104	104	103	104	100
1998	103	103	103	103	102	103	100
1999	102	103	103	102	103	102	100
2000	100	100	100	100	100	100	100

Source: Marshall & Swift, October, 2000

**2001 COST INDEX
FOR REAL PROPERTY FIXTURES & LEASEHOLD IMPROVEMENTS**

June 30, 2000 Level of Value

This cost index is provided to assist the assessor in relating original or historical costs of fixtures or leasehold improvements to the real property level of value. The items may be valued using real property appraisal records for computations and should be assessed to the owner of record.

When using this method of valuation, the property must be classified and abstracted as real property improvements. The factors are useful only in the cost approach when attempting to factor historical costs to the correct level of value. All cost approach value estimates must be reconciled to the sales comparison (market) and income approaches to value as with other real property improvements. The factors found in this table are for estimating replacement costs only and do not include an allowance for depreciation.

Year Acquired	Factor %
1975	268
1976	250
1977	233
1978	209
1979	190

1980	176
1981	165
1982	160
1983	154
1984	148

1985	145
1986	144
1987	143
1988	140
1989	137

1990	133
1991	132
1992	130
1993	124
1994	119

1995	116
1996	115
1997	111
1998	109
1999	107

2000	100

Source: Marshall & Swift Co. and Division of Property Taxation

AVERAGE ECONOMIC LIFE ESTIMATES

The average economic life estimates are provided for assistance in applying the percent good depreciation tables for each type of property being valued. The economic life recommendations are based upon the Class Life Asset Depreciation Range published by the Internal Revenue Service and other sources. Further information about the estimates may be found in I.R.S. publication **946, "How To Depreciate Property"**, available from the I.R.S.

The economic life estimates are based on average national service lives and assume normal use and maintenance of the property. Use of economic lives that differ from those in the estimates must be documented with specific market information. Counties and taxpayers are encouraged to provide this documentation for review by the Division of Property Taxation for possible update of existing published lives.

For specific types of equipment, economic life estimates were developed based on studies completed by the Division of Property Taxation.

Property Type	Recommended Economic Life (years)
RESIDENTIAL/COMMERCIAL	
Residential rental furnishings	10
Apartment, hotel and motel furnishings	10
COMMERCIAL	
Wholesale Trade Level	
Wholesale trade machinery, equipment, and furnishings	9
Retail Trade Level	
Retail trade machinery equipment, and furnishings	9
Service Trade Level	
Adding machines, calculators	6
Amusement parks	12
Auto repair shops	10
Barber and beauty shops	10
Cable Television	
Subscriber converters	5
Test equipment	8
Origination equipment	9
Distribution & subscriber connection equipment	10
Headend equipment	11
Microwave systems	9
Computers – personal & accessories	3 *
Computers – other & stand-alone peripherals	4 *
Computer-dependent machinery & equipment	4
Construction equipment, general	6
Copiers and duplicators	5
Data handling equipment, except computers	6
Electronic equipment, except computers	6
Laundry and dry cleaning	10
Office furniture	10
Professional services	9
Radio and television broadcasting	6
Recreation and amusement	10
Restaurant and bar (all)	10
Shopping carts	5
Signs (Billboard)	20
Signs (Other) By Typical Business Life	

* Use Appropriate Computer Percent Good Table 2001.

Source: Division of Property Taxation, Marshall & Swift, & I.R.S.

Equipment Type	Recommended Economic Life (years)
Service Trade Level	
Telecommunication Machinery & Equipment	4
Theater	10
Telecommunication Towers	20
Typewriters	6
Vending Machines	10
Video & Video Arcade Games	6
INDUSTRIAL	
Manufacturing Trade Level	
Aerospace	10
Apparel and fabricated textiles	9
Bakeries and Confectionery	12
Brewery	12
Canneries and frozen food	12
Cement manufacture	20
Cereal, flour, grain and mill products	17
Chemicals and related products	10
Clay and gypsum products	15
Concrete manufacture	15
Dairy products manufacturing	12
Electrical equipment manufacturing	10
Electronic equipment manufacturing	6
Fabricated metal products	12
Special tools	3
Food and beverage production	12
Special handling devices	4
Glass and glass products	14
Special tools	3
Jewelry	12
Lumber, wood products and furniture	10
Machinery (not listed in this section)	10
Meat packing	12
Motion picture and television production	12
Paint and varnish	10
Plastics and plastic products	11
Special tools	3
Printing and publishing	11
Professional and scientific instruments	10
Paperboard and pulp	10
Rubber products	14
Special tools	4

Source: Division of Property Taxation, Marshall & Swift, & I.R.S.

Equipment Type	Recommended Economic Life (years)
Manufacturing Trade Level	
Semi-conductor manufacturing	5
Research and development	3
Test equipment	5
Wafer fabrication	3
Soft drink bottling	12
Steel and related products	15
Stone products	15
Sugar and sugar products	18
NATURAL RESOURCES	
Mining-Metallic and Nonmetallic	
Mining, quarrying, & milling equipment	10
Petroleum and Natural Gas	
Exploration, drilling	6
Production (Excluding pipelines)	14
Marketing, retail	9
Refining	16
Timber	
Logging	6
Sawmills, permanent	10
Sawmills, portable	6

Source: Division of Property Taxation, Marshall & Swift, & I.R.S.

PERCENT GOOD TABLE

The personal property percent good table is provided to assist the assessor in estimating the replacement cost new less normal depreciation (RCNLD). The column headings represent the average service life expectancy of the personal property being appraised. Each column contains the percent good factor for a specified age in the life of the property.

Percent good tables measure the value remaining in an item. Depreciation tables measure the loss in value at a specified age. The factor shown in the columns of the percent good table represents the percentage of RCN remaining at a specified age. The percent good tables are built upon the following assumptions:

1. Iowa State Univ. property retirement & depreciation studies
2. A specified rate of return
3. Average condition and usage of typical property

The percent good table is generic in nature. It was designed to be generally useful for the majority of personal property. It is not specific to any particular industry or type of personal property.

The table was designed to account for normal physical depreciation. Additional functional and/or economic obsolescence may also exist. If documented to exist, additional functional and economic obsolescence must be measured in the marketplace either using the market approach or rent loss methods. In addition, any adjustments to the percent good due to the condition of the subject property must be defensible and documented.

The minimum percent good shown for each of the columns is useful as a guide to residual value. It is not absolute and must be reconciled with market information for similar types of property in order to be valid. If the market shows that the actual value of personal property is lower than the value arrived at by using the minimum percent good, the use of the minimum percent good should be rejected in favor of the lower value. The actual value of the personal property must be determined as long as the property is still in use.

If the cost-calculated value is lower than the market and/or income approach, when the item reaches its minimum percent good, the assessor should review the original cost, all assigned factors, the physical condition of the property, and other pertinent contributors to value. If these are correct, the assessor must use the cost approach value as the actual value of the property pursuant to 39-1-103(13)(a), C.R.S.

As the property under appraisal ages, the cost approach becomes less indicative of the property value. After fifteen years of age, the recommended valuation procedure is to measure the value of depreciated equipment directly in the marketplace, if possible.

To use the table, the assessor must determine the economic life and the age of the subject property. The percent good may be determined by moving across the columns until the one specified for the economic life is reached and then down this column to the point that reflects the effective age of the property.

Example:					
Property Type	Economic Life	Age	RCN	Percent Good	RCNLD
Office Desks	10 years	5 years	\$1,706	62%	\$1,058

The assessor must also consider functional and economic obsolescence, abnormal physical condition, or other factors that might affect the value of the equipment. The assessor should also consider the frequency and extent of maintenance to the property. Extensive maintenance or reconditioning of the property may extend the economic life of the property just as a lack of maintenance may shorten the economic life.

DEPRECIATED VALUE FLOOR

When an item of personal property has reached its minimum depreciated value of 15 percent (or 7 percent for personal and other computer equipment), the applicable Replacement Cost New (RCN) trending factor in use at that time is "frozen." For the following assessment years, this RCNLD value does not change, other than to reflect the proper level of value, until the item is permanently taken out of service. An exception to this rule applies when the property has been reconditioned to extend its remaining economic life.

Even though an item of personal property has been permanently taken out of service, but has not been scrapped or sold, it still has value. However, additional functional and/or economic obsolescence may exist.

It is possible, however, that the market or income approach may indicate lower values than 15 percent (or 7 percent) of RCN. In addition, as property ages, the use of original installed cost multiplied by trending factors may not yield reasonable RCN values. Any RCNLD estimate should be crosschecked with sales comparison (market) and income information sources, if possible, and the appropriate value used.

VALUATION OF USED PERSONAL PROPERTY

The valuation of used personal property requires that a decision be made concerning the remaining economic life of the property. If the personal property's elapsed age from its actual year of manufacture, or estimated effective year of manufacture, is equal to or greater than the number of years in which the personal property would have reached its depreciated value floor, then the price paid for the personal property is to be treated as RCNLD and "frozen" at that value. RCN trending and percent good factors will not be applied to the frozen value and that value will only change due to the appropriate level of value factor being applied for each assessment year, until the item is permanently taken out of service.

An exception to this rule applies when the personal property is reconditioned to extend its remaining economic life. Then the reconditioned property is treated as a new item of personal property and the formerly frozen value is treated as acquisition cost that is subject to depreciation over a complete economic life of a new item.

Even though an item of personal property has been permanently taken out of service, but has not been scrapped or sold, it still has value. However, additional functional and/or economic obsolescence may exist.

If, however, the elapsed age from the year of manufacture, or estimated effective year of manufacture, is less than the number of years when the personal property would have reached its depreciated value floor, as evidenced in its recommended economic life from the preceding tables, then the property is treated as a new item of personal property and the owner's acquisition cost is subject to depreciation over the complete economic life as would be used for a new item. However, the resulting value should be compared to the sales comparison (market) value for the item, if possible.

General Percent Good Table 2001

		Average Economic Life																		
Age		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
	1	68	77	82	86	89	90	92	93	94	95	95	96	96	97	97	97	98	98	
	2	39	54	64	71	77	80	83	86	88	89	91	92	93	93	94	95	95	96	
	3	18	34	47	57	64	70	74	78	81	83	85	87	89	90	91	92	93	93	
	4	15	18	32	43	52	59	65	70	74	77	80	82	84	86	87	89	90	91	
	5		15	19	31	40	49	56	62	67	71	74	77	80	82	84	86	87	88	
E																				
F	6			15	20	30	39	46	53	59	64	68	72	75	78	80	82	84	85	
F	7				15	21	31	39	45	52	57	62	66	70	73	76	78	80	82	
E	8					15	22	30	37	45	50	56	61	65	68	71	74	77	79	
C	9						15	23	30	37	44	50	55	59	63	67	70	74	76	
T	10							15	24	30	38	43	49	54	59	62	66	70	72	
I																				
V	11								15	25	30	38	44	49	54	57	62	66	69	
E	12									20	26	31	37	43	49	52	57	62	65	
	13									15	22	27	34	37	43	47	53	58	61	
	14										15	24	28	34	40	43	49	53	57	
A	15											18	22	29	35	40	45	49	53	
G																				
E	16										15	20	23	30	35	40	45	49		
	17											15	22	25	31	36	41	45		
	18												15	24	26	32	37	41		
	19													20	22	28	33	37		
	20														15	18	24	29	34	
	21															17	20	25	30	
	22															15	17	22	27	
	23																15	19	24	
	24																	15	22	
	25																		19	
	26																		15	

Source: Division of Property Taxation

The following table has been developed for **Personal Computers (PCs) and Accessories:**

Percent Good Table 2001

Average Economic Life		
<u>Age</u>		<u>3</u>
EFF	1	68
	2	39
A	3	18
G	4	7
E		

Source: Division of Property Taxation

The following table has been developed for **Other Computer Equipment Including Stand-Alone Computer Peripherals:**

Percent Good Table 2001

Average Economic Life		
<u>Age</u>		<u>4</u>
EFF	1	77
	2	54
A	3	34
G	4	18
E	5	7

Source: Division of Property Taxation

For items of personal property classified as Computer-Dependent Machinery and Equipment, a four (4) year economic life is assigned. The four (4) year life depreciation table found in the General Percent Good Table in this section should be used.

If you have questions concerning **Personal Computers (PCs) and Accessories, Other Computer Equipment Including Stand-alone Computer Peripherals**, or Computer-Dependent Machinery and Equipment, please refer to Section VII, **SPECIAL PERSONAL PROPERTY VALUATION ISSUES, CLASSIFICATION AND VALUATION OF PERSONAL COMPUTERS (PCs), OTHER COMPUTER EQUIPMENT, COMPUTER-DEPENDENT EQUIPMENT, AND TELECOMMUNICATION EQUIPMENT.**

LEVEL OF VALUE ADJUSTMENT FACTORS

The following table contains the indexes for adjusting current actual value of personal property to the level of value in effect for real property as specified by 39-1-104(12.3)(a)(I), C.R.S. The procedure involves the multiplication of the current actual value estimate by the appropriate factor for the type of property being valued.

Example:				
Property Type	Factor Number	Current Actual Value	Factor %	6/30/00 Level of Value
Office Desks	3	\$1,058	100%	\$1,058

PERSONAL PROPERTY ADJUSTMENT FACTOR FOR 2001 ASSESSMENT YEAR

June 30, 2000 Level of Value

Factor Table	
Reference Number	Reverse Index Percent
1	1.00
2	1.00
3	1.00
4	1.00
5	1.00
6	1.00
7	1.00
8	1.00
9	1.00
10	1.00
11	1.00
12	1.00
13	1.00